

# GCT

## (Groundcrew Coordination Training)



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# Warning!



**CONSIDER THE POSSIBLE  
CONSEQUENCES IF YOU ARE  
CARELESS IN YOUR WORK**

# Groundcrew Coordination Training



“Managing Risk and  
Maximizing Effectiveness”

# Groundcrew Coordination Training (GCT) Agenda



- Welcome/Remarks
- Introduction to GCT
- Behavioral Skills
- Case Studies

# GCT



**Terminal Objective:** Upon completion of the GCT program, the student will achieve a better understanding of how crew coordination and utilization of the seven behavioral skills can play a valuable role in preventing ramp mishaps.

# GCT

## Enabling Objectives

- Gain an understanding of what GCT is and why it is important.
- Discuss the seven behavioral skills associated with GCT and define them accurately.
- Given an aircraft ground mishap, be able to evaluate its causes, and determine how GCT could be used to avoid them in the future.

# GCT

## Motivating Statement



GROUNDCREW COORDINATION TRAINING is a course of instruction developed from the Navy's Aircrew Coordination Training (ACT) program. During the 80's, the Navy conducted a research effort to identify common factors in crew resource management mishaps. They identified seven behavioral skills that, when not used, were associated with aviation mishaps. An analysis of ramp and maintenance mishaps show that a lack of crew coordination and behavioral skill use was a major factor.

*As a result, a crew coordination course of instruction was developed specifically for line and maintenance personnel.*

**COMMERCIAL APPLICATIONS**

Continental Airlines initiated a Crew Coordination Concepts program “*to equip all maintenance personnel with the skill to use all resources to improve safety and efficiency.*” The two day workshop covers organizational routines, assertive behavior, leadership styles, stress management, decision-making, and interpersonal skills. The results after the first three years of CCC were remarkable: employees received training (2/3 workforce)

- Maintenance ground damage costs cut by 66%
- Dramatically reduced upward trend in injuries

# GCT

## Definition



### What is Groundcrew Coordination?

A process of coordinated action among groundcrew personnel which enable them to interact effectively while performing mission tasks and handling emergencies.

**LEARNING TO ACT AS A TEAM!**



e day the Team fell apar

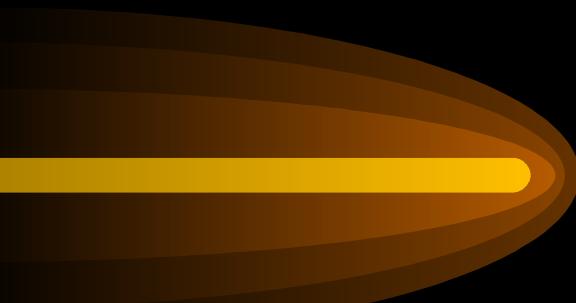
# Team Operations



- Maintenance Activities
- Ramp/Line Activities
- Ordnance/Stores Activities

# GCT

## Importance



### Why is GCT Training important?

Good groundcrew coordination can increase mission effectiveness by minimizing crew-preventable errors, maximizing crew resources, and optimizing risk management.

# GCT

## Naval Aviation Importance

**Failure to coordinate was found in:**

- Almost 70% of All Aircraft Ground Mishaps!
- Over 50% of Personal Injury Maintenance Mishaps!
- Almost 50% of All Class A /B Mishaps!

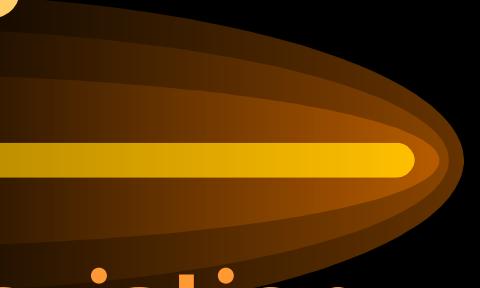
# We are not alone!



## Airlines Worldwide:

Maintenance problems are the second greatest contributor to onboard fatalities, following controlled flight into terrain (CFIT).

# But What are the Numbers?



**One study of commercial aviation jet accidents found:**

- Improper maintenance contributed to 15% of commercial jet accidents.
- 20-30% of engine in-flight shutdowns and 50% of engine-related flight delays/cancellations are caused by maintenance error.
- 48,800 unairworthy aircraft dispatched

***"Risk is inherent in every aspect of our business. The challenge is to reduce or eliminate that risk and preserve our most precious asset."***

**Sailor**  
Former CG 2



# Human Factor

## Error Causes

### “Dupont’s Dirty Dozen”

- 1) Lack of Communication Resources
- 2) Complacency
- 3) Lack of Knowledge Assertiveness
- 4) Distraction
- 5) Lack of Teamwork
- 6) Poor Decision Making
- 7) Lack of Resources
- 8) Pressure
- 9) Lack of Training
- 10) Stress
- 11) Lack of Awareness
- 12) Poor Work Environment

# GCT

## Seven Behavioral Skills

- ✓ Decision Making
- ✓ Assertiveness
- ✓ Mission Analysis
- ✓ Communication
- ✓ Leadership
- ✓ Adaptability/Flexibility
- ✓ Situational Awareness

# GCT

## Behavioral Skill Dimensions

- Communication - the ability to clearly and accurately send and acknowledge information and provide useful feedback.
- Assertiveness - the willingness to actively participate and the ability to state and maintain individual position.
- Mission Analysis - the ability to coordinate, allocate, and monitor crew and ramp resources

# GCI

## Behavioral Skill Dimensions (continued)

- Decision Making - the ability to use logical and sound judgment based on available information
- Situational Awareness - the ability to maintain awareness of what is happening around you as well as your primary task
- Adaptability/Flexibility - the ability to alter courses of action to meet situational demands

# GCT

## Behavioral Skill Dimensions (continued)

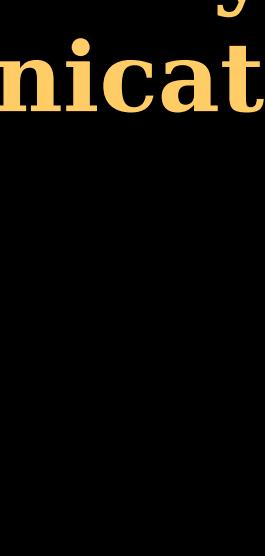
- Leadership - the ability to direct and coordinate the activities of others and to stimulate them to work together as a team.



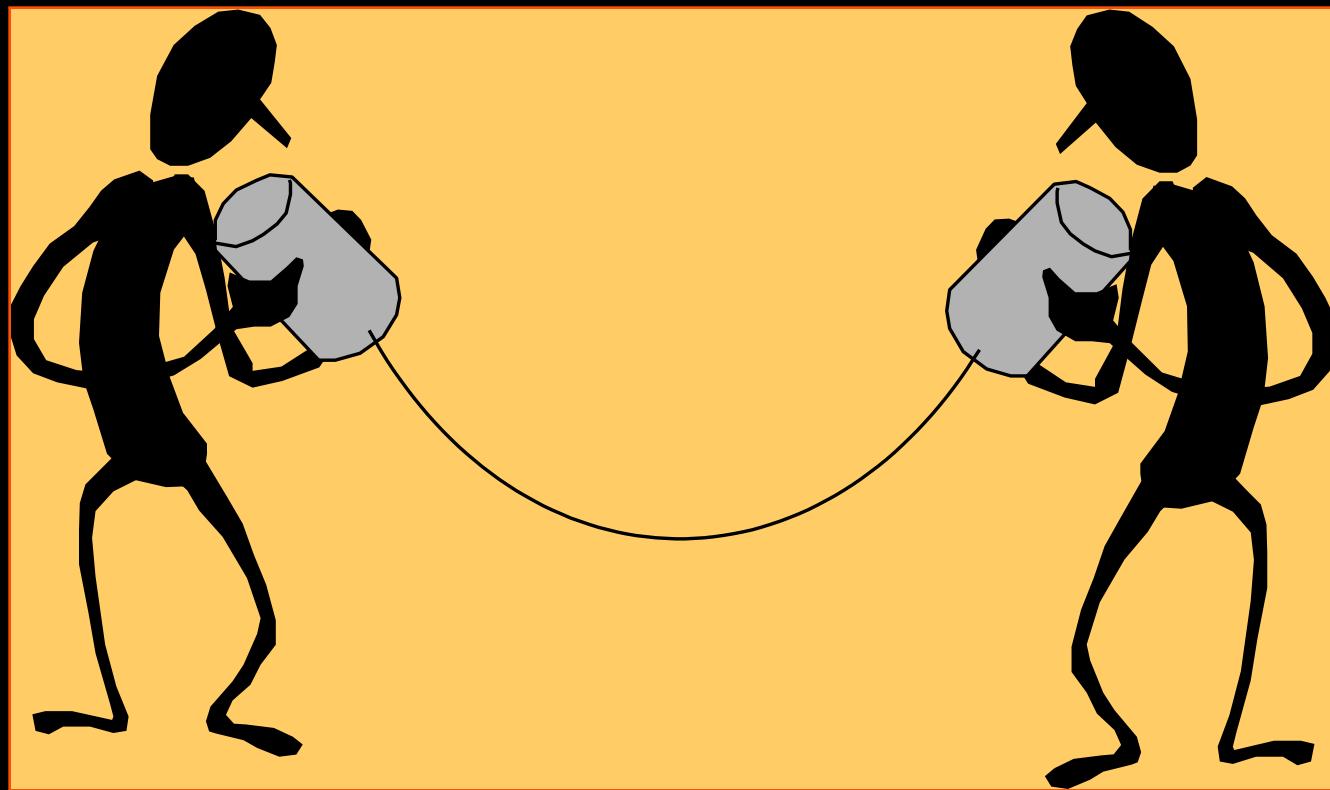
# GCT



“Safety is built on integrity,  
trust and leadership, created  
and sustained by effective  
niciat



# Communication



# Lead Mechanics' Skills Survey



1/3 - “Human relations/dealing with people” was the most challenging part of job

1/3 - “Human relation/dealing with people” was part of job least prepared for!

1/2 - said People/Communication skills are the most important

# University Study of Commercial Airline Maintenance

Face-to-Face  
Communication of log book  
write-ups (“gripes”) improves  
mechanics’ troubleshooting and  
reduces repair time.

# BEHAVIORAL SKILL:

## Communication

### Importance

- Conduct Missions Effectively
- Avoid Hazards Leading to Mishaps
- Pass Critical Information Between Crews
- Maintain Crew Situational Awareness

# BEHAVIORAL SKILL: Communication

## Importance

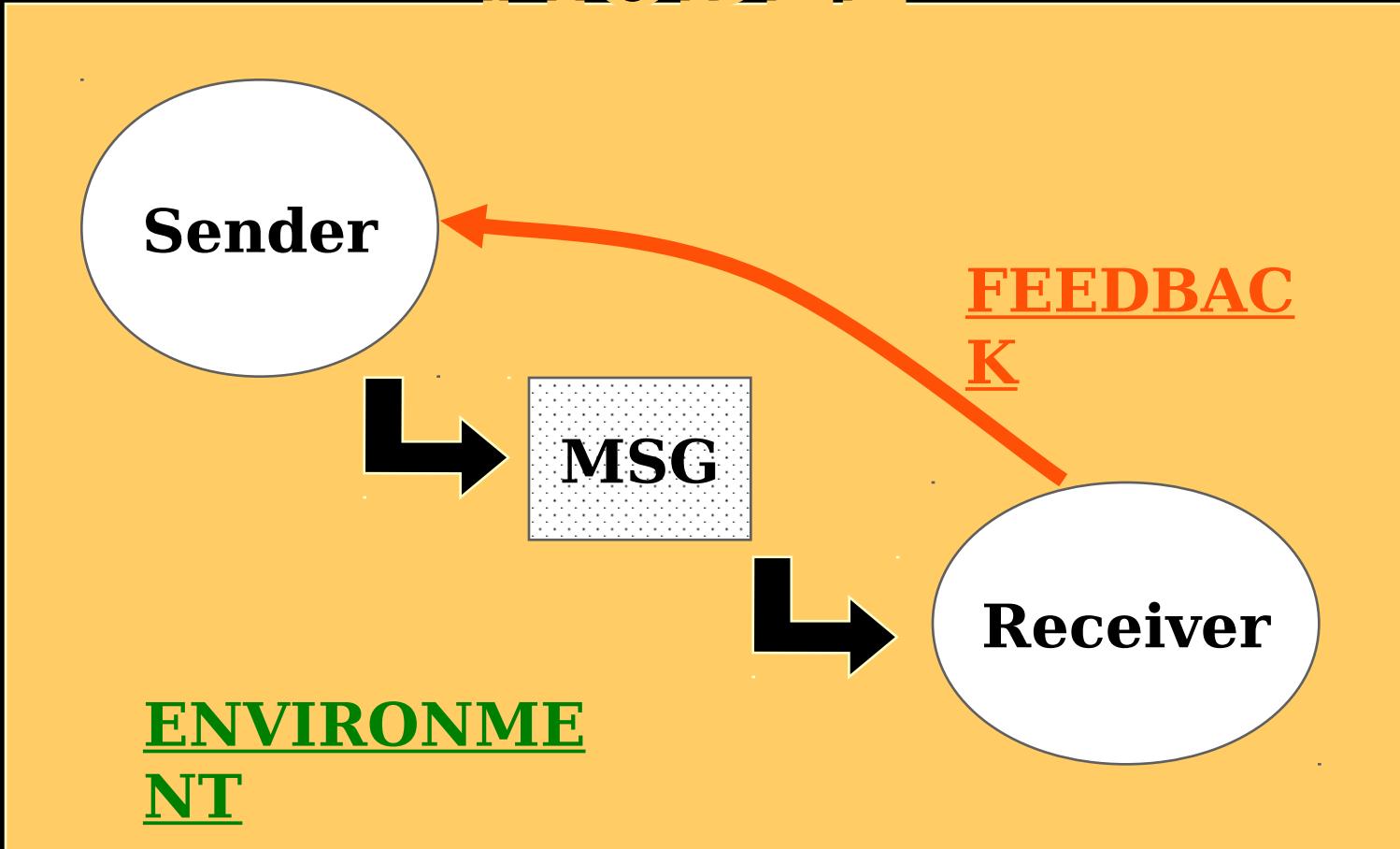
**Communication failures occur in:**

- 49% of Aircraft Ground Mishaps!
- 33% of Personal Injury Mishaps!



Fill it up!

# BASIC COMMUNICATIONS MODEL



# BEHAVIORAL SKILL: Communication

## Sender's Responsibilities

- Provide Information as Required
- Provide Information When Asked
- Deliver Information Clearly/Concisely
- Provide Useful and Accurate Information
- Verbalize Plans
- Use Appropriate Non-Verbal

# BEHAVIORAL SKILL:

## Communication

### **Receiver's Responsibility**



- Acknowledge Communications
- Repeat Information as required
- Paraphrase Information
- Clarify Information
- Provide Useful Feedback

# BEHAVIORAL SKILL: Communication **Barriers**



- Passive Listening
- No/Poor Feedback
- Non-Standard Terms
- Inappropriate Communication Methods
- Vague/Late INFO

# BEHAVIORAL SKILL:

## Communication

### **Overcoming Barriers**

- Use Active Listening
- Require Feedback
- Use appropriate communication mode
- Use Appropriate Emphasis (decibel level)
- Use Standard Terminology

# **BEHAVIORAL SKILL:**

## **Communication**

### **Active Listening**

#### **Don't**

Debate

Detour

Preplan

Tune Out  
Language

#### **Do**

Ask Questions

Use Paraphrasing

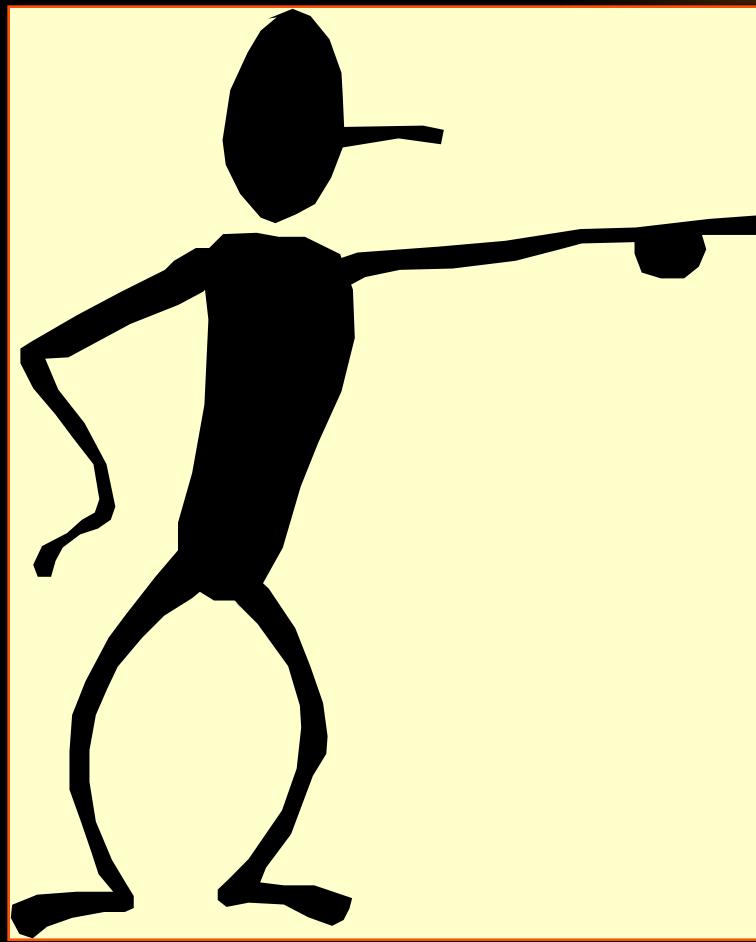
Make Eye Contact

Use Positive Body



I GUESS WE'RE  
DOWNERS

# Assertiveness



# **BEHAVIORAL SKILL:**

## **Assertiveness**

### **Encompasses**

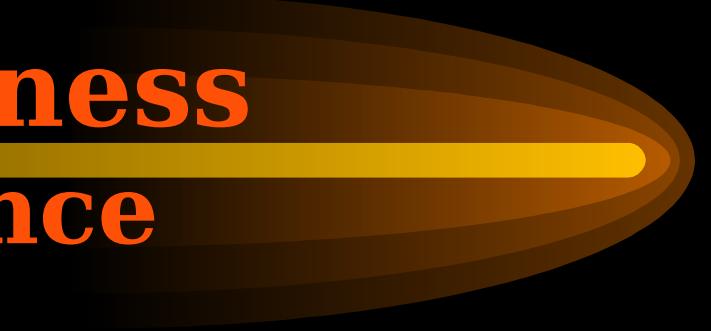


- Willingness to Make Decisions
- Demonstrating Initiative/Courage to Act
- Stating/Maintaining Positions Until Completely Convinced by the Facts

# **BEHAVIORAL SKILL:**

## **Assertiveness**

### **Importance**



Assertiveness failures are found in almost

- 24% of Aviation Ground Mishaps
- 10 % of Personal Injury Mishaps

# “Why, for five cents...”



# **BEHAVIORAL SKILL:**

## **Assertiveness**

## **Behavior**

- Provide Relevant INFO Without Being Asked
- Make Suggestions
- Ask Questions as Necessary
- Confront Ambiguities
- Maintain Position When Challenged
- State Positions on Decisions/Procedures
- Refuse an Unreasonable Request

# BEHAVIORAL SKILL:

## Assertiveness

### Barriers

- Rank differences
- Position Authority
- Lack of Experience/New to Unit
- Coercion
- Lack of Confidence

# **BEHAVIORAL SKILL:**

## **Assertiveness**

### **Overcoming Barriers**

- Get Attention of Receiver
- Use Active Verbs
- State Your Concern
- Offer a Solution
- Recommend Action
- Ask for Feedback

# BEHAVIORAL SKILL:

## **Assertiveness**

### **“Rule of Thumb”**



If a disagreement exists, take the most conservative action until more information is available.

# **BEHAVIORAL SKILL:**

**Assertiveness**

**Situations Requiring  
Assertiveness**

- Pre-Mission Brief
- Mission Execution
- Post-Mission Brief



# Assertiveness from Above